BEFORE THE UNITED STATES PATENT AND TRADEMARK OFFICE
ON APPEAL TO THE BOARD OF APPEALS

In re Application of: Ray Whitney	)	Date: April 1, 2008
Serial N°: 09/921,375	)	Group Art Unit: 2642
Filed: 08/02/2001	)	Examiner: My Xuan Nguyen
For: Digital, Wireless PC/PCS Modem	)	Docket No. 471

CERTIFICATE OF SERVICE
I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, P.O. Box 1450, Alexandria, VA 22313-1450.

Tony Lakos 4/9/08
Name: Date
TERRY LAKOS

AMENDED BRIEF ON APPEAL

Hon. Commissioner of Patents and Trademarks
Alexandria, VA 22313-1450

Dear Board:

This is an amended Brief on Appeal made compliant after a Notice sent from the Patent Office on 03/18/2008. The Appeal is based from the Final Rejection, dated 07/31/2007, for the above identified application.

REAL PARTY IN INTEREST

The party(ies) named in the caption of this brief are the real parties of interest in this appeal.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to appellant, appellant's legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in this pending appeal.

STATUS OF CLAIMS

Currently pending are claims 12-13, which were all finally rejected, and are all herein under appeal.

STATEMENT OF AMENDMENTS

A supplemental amendment was filed on 10/29/2007 after final rejection. Amendments made to claims 12 and 13 were entered for purposes of Appeal.

SUMMARY OF CLAIMED SUBJECT MATTER

Referring now to FIGS. 1-5, 7 and 8, a digital, wireless PC/PCS modem 10, hereinafter referred to as PC/PCS modem 10, is shown for incorporation with personal home computers 42, laptop units 44, hand-held computer units 46 and cellular phones 48 for providing wireless communication via satellite transmission. The PC/PCS modem 10 features the ability to transmit

video, computer, voice, and fax data. The PC/PCS modem 10 is connected to a circuit board 20 which holds internal electronic components.

First, a description of the PC/PCS modem 10 for utilization with laptop units 44, hand-held computer units 46 and cellular phones 48 is disclosed henceforth.

Referring now to FIGS. 1, 3, and 4 , a PC/PCS modem 10 is shown in a removed state from a laptop unit 44. The PC/PCS modem 10 is in a PCMCIA card type configuration universally known in the art as associated with a laptop unit 44. The PC/PCS modem 10 would connect into the laptop unit 44 using a type II PCMCIA card slot 22. A perspective view of the PC/PCS modem 10 is shown in FIG. in a utilized state with the PC/PCS modem 10 fully seated in the type II PCMCIA card slot 22 of the laptop unit 44.

Referring more specifically to FIGS. 7 and 8, for purposes of this disclosure, it is envisioned that the hand-held computer unit 46 is designed and configured as having a type II PCMCIA card slot 22 for receiving the PC/PCS modem 10. It is further envisioned that the cellular phone 48 is designed and configured with a PC/PCS modem 10 hingedly attached as a free end 48a with an electrical connector 57 comprising a series of electrical contacts 59, wherein the free end 48a is scaled equivalent to the aforementioned PC/PCS modem 10 for engaging the type II PCMCIA card slot 22.

An antenna 50, complete with a protective cap 51, is provided and tuned to the frequency of a corresponding satellite link and relay wireless system for transmitting and receiving digital signals and sending them to the circuit board 20 to be processed. Such a system allows transference of datum and other services from the laptop unit 44 from home or while traveling. The antenna 50 is attached to the PC/PCS modem 10 using a swivel joint assembly 54. The

swivel joint assembly 54 allows for the antenna 50 to be rotated and aligned to provide optimum transmission and reception of digital signals unlimited with respect to user's locale. The antenna 50 is designed and configured so as to minimize interferencial effects suffered by satellite link and relay wireless communications which commonly occur during storms, while maintaining maximum performance.

The swivel joint assembly 54 is shown providing for the antenna 50 to be in a collapsed position. Such collapsed position facilitates storage and transportability of the laptop unit 44, the hand-held unit 46, and the cellular phone 48.

It should be noted that the orientation of the antenna 50 with respect to the PC/PCS modem 10 and the orientation of the PC/PCS modem 10 with respect to the laptop unit 44 is for purposes of clarity only and is not intended to be a limiting factor.

Referring now to FIG. 3, a top view of the PC/PCS modem 10 is disclosed. The PC/PCS modem 10 is supplied in the standard shape, size and configuration to match the PCMCIA standards as developed by the computer industry. An enclosure top 55 is held in place by a series of fastening means 68, such as a screw. The enclosure top 55 is removable to allow for repair or adjustment of any internal electronic components located inside the PC/PCS modem 10.

Referring now to FIG. 4, along the leading edge of the PC/PCS modem 10 is an electrical connector 57, comprising a series of electrical contacts 59. The electrical connector 57 would be of the standard arrangement as defined by the computer industry for PCMCIA connections.

Referring next to FIG. 5, according to the preferred embodiment of the present invention, the laptop unit 44 is provided with at least three tuner cards 70 for providing a multi-task video screen 80 split into a plurality of frames 82 of equal dimension, wherein each frame 82 providing

for a specific functional operation, task, or application.

Specifically referring to FIGS. 2 and 5, for purposes of this disclosure, the preferred embodiment is shown and described as having nine tuner cards 70 thus providing a multi-task video screen 80 split into nine frames of equal dimension, wherein each frame providing for a specific functional operation, task, or application.

In operation, the tuner cards 70 provide the user with the capability of performing various functional operations and transmissions including video, voice, text, fax, and viewing of satellite television broadcast, while all nine frames 82 being simultaneously displayed via the multi-task video screen 80.

Video transmission is accomplished via a swivel-based, independent micro camera 90 rotatable 180°.

A microphone 92 is provided for converting a transmitted sound into a sound signal, wherein the sound signal is further converted into a transmitting signal which is transmitted through the antenna 50, 50a.

A loudspeaker 94 is provided for generating an audible sound in response to reception of digital signals. The loudspeaker 94 and the microphone 92 are coupled to a microprocessor 65 via an audio interface block 66.

Referring now to FIG. 6, an alternate embodiment of the present invention is disclosed, wherein an integrated PC/PCS digital wireless modem 12, hereinafter referred to as integrated PC/PCS modem 12, is shown for incorporation within personal home computers 42 for providing wireless communication via satellite transmission. The integrated PC/PCS modem 12 features the ability to transmit video, computer, voice, and fax data. An antenna 50a is provided and is

connected to the integrated PC/PCS modem 12 for transmitting and receiving digital signals and sending them to the circuit board 20 to be processed. The antenna 50a, complete with a protective cap 51a, is provided and operatively tuned so as to allow transmission to a corresponding satellite link and relay wireless system.

The antenna 50a is attached to an external housing 52 of the personal home computer 42 using a swivel joint assembly 54 which allows for the antenna 50a to be rotated and aligned to provide optimum transmission and reception of digital signals unlimited with respect to user's locale. The antenna 50a is designed and configured so as to minimize interferencial effects suffered by satellite link and relay wireless communications which commonly occur during storms, while maintaining maximum performance. It should be noted that the orientation of the antenna 50a with respect to its attachment location as illustrated in FIGS. , is for purposes of clarity and is not intended to be a limiting factor.

Specifically referring to FIGS. 5 and 6, the alternate embodiment of the present invention is provided with at least three tuner cards for providing a multi-task video screen 80 split into a plurality of frames 82 of equal dimension, wherein each frame 82 providing for a specific functional operation, task, or application such as video, voice, text, fax, and viewing of satellite television broadcast. The alternate embodiment of the present invention is shown and described as having nine tuner cards 70.

Video transmission is accomplished via a swivel-based micro camera 90 rotatable 180°.

A microphone 92 is provided for converting a transmitted sound into a sound signal, wherein the sound signal is further converted into a transmitting signal which is transmitted through the antenna 50, 50a.

A loudspeaker 94 is provided for generating an audible sound in response to reception of digital signals. The loudspeaker 94 and the microphone 92 are coupled to a microprocessor 65 via an audio interface block 66.

Referring next to FIG. 5, a description regarding circuitry associated with the PC/PCS modem 10 incorporated with the laptop unit 44 is disclosed. It should be noted; however, that the circuitry to be described henceforth is intended to be equally applicable to the alternate embodiment of the present invention. Digital signals transmitted via satellite link and relay wireless system is received by the antenna 50 and are passed therefrom through a series of line amplifiers 96. An input buffer 98 is coupled between the series of line amplifiers 96 and a network switching element 99, which receives input from the PC/PCS modem 10. Frequency/Feedback 112 along with Channel/Screen selection function 114 flows from the switching network element 99 bi-directionally to a multi-tuner module 100 where data is passed therefrom to the microprocessor 65. This data is then passed on to a universal asynchronous receiver transmitter 72 via a first bi-directional path 75. The universal asynchronous receiver transmitter 72 is responsible for all data transfers from the computer system to its modem output system. This described data transfer occurs between these and all modules through a series of parallel bus 80, a series of serial transmit bus 85 and a series of serial receive bus 90. The first of these occurs with a micro controller 95. The micro controller 95 is dedicated to aligning the data in the proper configuration to be processed by a voice, audio, data, fax and video processor 110 (indicated by a dashed box) through another parallel bus 80, serial transmit bus 85 and serial receive bus 90. The voice, data, fax and video processor 110 consists of a digital signal processing support module 105, used as a prebuffer into a digital signal processor 112. The

digital signal processor 110 performs all necessary operations on the data, including handshake verification, through a series of built in algorithms. It is envisioned that the algorithms would be software and firmware ungradable to allow for future enhancements in wireless communications standards. Data from the digital signal processor 112 is then passed to a coding - decoding device 115 where it is assembled into data packets. Data from the coding - decoding device 115 is transferred on a transmit "A" line 120 and a receive "A" line 125 to a PCS module 130 and an internal data access arrangement 135. The PCS module 130 provides the necessary interface to the wireless personal communication system through the antenna 50 and will be internally programmable with regards to calling systems, phone numbers, data transfer protocols, system requirements and the like. It will be password protected to only allow authorized sellers to program the above variables. It is envisioned that this programming and reprogramming will occur separate from the laptop unit 44 (not shown in this FIG.) through a special interface. The internal data access arrangement 135 is in physical connection to a particular phone system and is envisioned to allow for specific system dependent items such as special ring requirements, caller identification and other host specific items. A switched data bus 140 shown as interconnecting to the universal asynchronous receiver transmitter 72, the digital signal processing support module 105, the PCS module 130, and the internal data access arrangement 135 allow for data acknowledgment and step transfer functions for data that is communicated on the serial busses. It should be noted that data transfers through all blocks in a bidirectional pattern as would be occurring during downloading and uploading of information.

Mapping of Independent Claim 12

12. A method to utilize a digital, wireless PC/PCS modem

having an antenna attached to a PCMCIA card-type interface in communication with an integrated circuit board, said modem works in conjunction with a computer provided with a swivel-based camera, a microphone and at least three tuner cards to relay wireless communications via satellite, said method comprises the steps:	...the alternate embodiment of the present invention is provided with at least three tuner cards for providing multi-task video screen 80 split into a plurality of frames 82 of equal dimension, wherein each frame 82 providing for a specific functional operation, task, or application such as video, voice, text, fax and viewing of satellite television broadcast (Pg. 13, ll. 5-10); video transmission is accomplished via a swivel-based micro camera 90 (Pg. 13, ll. 12-13); A microphone 92 is provided (Pg. 13, line 14)
passing digital signals transmitted via a satellite link and a wireless relay system from said antenna that receives said signals to a series of line amplifiers,	Digital signals transmitted via satellite link and relay wireless system is received by the antenna 50 and are passed therefrom through a series of line amplifiers 96. (Pg. 14, ll. 4-6).
said series of line amplifiers and a network switching element have an input buffer coupled therebetween, said network switching element receives input from said PC/PCS modem,	An input buffer 98 is coupled between the series of line amplifiers 96 and a network switching element 99, which receives input from the PC/PCS modem 10. (Pg. 14, ll. 6-8).
said network switching element has a frequency/feedback along with a channel/screen selection function flowing from said switching network bi-directionally to a multi-tuner; passing data received from said multi-tuner module to a microprocessor; and	Frequency/Feedback 112 along with Channel/Screen selection function 114 flows from the switching network element 99 bi-directionally to a multi-tuner module 100 where data is passed therefrom to the microprocessor 65. (Pg. 14, ll. 8-11).
passing said data on to a universal asynchronous receiver transmitter via a first bi-directional path, said universal asynchronous receiver transmitter is responsible for all data transfers from a computer system to the computer system's modem output system,	This data is then passed on to a universal asynchronous receiver transmitter 72 via a first bi-directional path 75. The universal asynchronous receiver transmitter 72 is responsible for all data transfers from the computer system to its modem output system. (Pg. 14, ll. 11-14)

wherein said data transfer occurs between all modules through a series of parallel bus, a series of serial transmit bus and a series of serial receive bus.	This described data transfer occurs between these and all modules through a series of parallel bus 80, a series of serial transmit bus 85 and a series of serial receive bus 90. (Pg. 14, ll. 14-16).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The art Examiner relies upon the following references for the bases of rejections:

U.S. Patent No. 5,915,020 to Tilord, which discloses a portable device that includes a hinged enclosure, a satellite antenna mounted to a display monitor and a PCMCIA card slot;

U.S. Patent No. 5,428,671 to Dykes, which discloses a laptop that contains a modem and a UART/support chip that serially communicates data to a controller; and,

U.S. Patent No. 6,141,062 to Hall *et al.*, which discloses multiple video streams multiplexed such that individual streams are synchronized with a particular clock signal.

In the Final Office Action dated Jul. 31, 2007, Examiner rejected claims 12 and 13 under 35 USC § 103(a) as being unpatentable over Tilford in view of Dykes and Hall.

ARGUMENT

Rejections under 35 U.S.C. 103(a)

Applicant firstly contends that Tilford cannot be considered a reference in the combination for Independent Claim 12 because it fails to teach the elements as cited by Examiner.

Tilford teaches a video camera 123 fitted within an enclosure case of a portable device (col. 13, ll. 50-51). Tilford shows the camera *fixed* within the enclosure (FIG. 8). Nowhere is it taught to comprise a *swivel* capability. Applicant rather claims a swivel feature to the camera.

Tilford teaches a buffer within a transport IC 68 (col. 11, ll. 65-68). The buffer stores output passed to the transport IC from an inverse forward correction block 66 (FEC^{-1}). The FEC^{-1} receives a bitstream downconverted from a tuner/demodulator 62 (col. 11, ll. 50-65; FIG. 7). Applicant alternatively claims an input *buffer coupled between a series* of amplifiers and a

network switching element. Nowhere in Tilford is a buffer taught or suggested either coupled to or between the Feed LNB 41 and the tuner/modulator 62. Applicant contends the varied placements of the buffers in both Tilford and Applicant's inventions cause a method for signal transmission to not be the same; Tilford cannot be considered a reference in the combination.

Applicant contends that because the foregoing argument overcomes Tilford as a reference, the base claim for which dependent claim 13 depends is in condition for allowance. Claim 13 incorporates all of the distinct limitations of Independent Claim 12; it is allowable for at least the reasons articulated in support of Claim 12. More importantly, Dykes cannot render Claim 13 obvious without Tilford in the combination.

U.S. Patent No. 5,428,671 to Dykes et al., assigned on its face to Compaq Computer Corporation, is directed to a modem for communication between a computer and a cellular phone. A host computer port is connected to a cellular phone port. The host computer sends commands to the cellular phone. The connection then converts the host computer commands into a format that can be received by the cellular phone. Once converted, the information is sent to the cellular phone. The host computer command is then executed.

The examiner cites in Dykes et al. Fig. 2, Col. 6 Lines 51 to Col. 8, Line 63. To paraphrase the portion of the cited reference, the computer in Dykes is bidirectionally connected to a UART comprising of several buses. A microprocessor organizes the data and a digital signal processor performs all operations through algorithms designed for communication with a modem. The organization of the data is for voice, data, and video.

In undertaking a determination of whether a reference, or a combination of references,

renders a claim(s) obvious under 35 U.S.C. § 103(a), the examiner must show that the reference or combination of references teach or suggest every element of the claim(s) in question. MPEP § 706.02(j). In regard to the several rejections of the claims under 35 U.S.C. § 103(a), based upon the above arguments, it is felt that the differences between the present invention and all of these references are such that rejection based upon 35 U.S.C. § 103(a), in addition to any other art, relevant or not, is also inappropriate. However, by way of additional argument applicant wishes to point out that it is well established at law that for a proper *prima facie* rejection of a claimed invention based upon obviousness under 35 U.S.C. § 103(a), the cited references must teach every element of the claimed invention. Further, if a combination is cited in support of a rejection, there must be some affirmative teaching in the prior art to make the proposed combination. See Orthopedic Equipment Company, Inc. et al. v. United States, 217 USPQ 193, 199 (Fed. Cir. 1983), wherein the Federal Circuit decreed, "Monday Morning Quarter Backing is quite improper when resolving the question of obviousness." Also, when determining the scope of teaching of a prior art reference, the Federal Circuit has declared:

> "[t]he mere fact that the prior art could be so modified should not have made the modification obvious unless the prior art suggested the desirability of the modification." (Emphasis added). In re Gordon, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

There is no suggestion as to the desirability of any modification of the references to describe the present invention. An analysis of the disclosures within the cited references fails to cite every element of the claimed invention. When the prior art references require a selective combination to render obvious a subsequent claimed invention, there must be some reason for the selected combination other than the hindsight obtained from the claimed invention itself.

Interconnect Planning Corp v. Feil, 774 F.2d 1132, 227 USPQ 543 (Fed. Cir. 1985). There is nothing in the prior art or the Examiners arguments that would suggest the desirability or obviousness of making a PC/PCS modem of the present functionality. Uniroyal, Inc. v. Rudkki-Wiley Corp., 837 F.2d 1044, 5 USPQ 2d 1432 (Fed. Cir. 1988). The examiner seems to suggest that it would be obvious for one of ordinary skill to attempt to produce the currently disclosed invention. However, there must be a reason or suggestion in the art for selecting the design, other than the knowledge learned from the present disclosure. In re Dow Chemical Co., 837 F.2d 469, 5 USPQ.2d 1529 (Fed. Cir. 1988); see also In re O'Farrell, 853 F.2d 894, 7 USPQ 2d 1673 (Fed. Cir. 1988).

Accordingly, the reversal of the Examiner by the honorable Board of Appeals is respectfully solicited.

Respectfully submitted,

John D. Gugliotta, P.E., Esq.
Registration No. 36,538

Patent, Copyright & Trademark Law Group, LLC
USPTO Customer No. 33055
6100 Oak Tree Boulevard
Suite 200
Independence, OH 44131

(330) 253-2225
Facsimile (330) 253-6658

CLAIMS APPENDIX

The claims on appeal are as follows:

12. A method to utilize a digital, wireless PC/PCS modem having an antenna attached to a PCMCIA card-type interface in communication with an integrated circuit board, said modem works in conjunction with a computer provided with a swivel-based camera, a microphone and at least three tuner cards to relay wireless communications via satellite, said method comprises the steps:

passing digital signals transmitted via a satellite link and a wireless relay system from said antenna that receives said signals to a series of line amplifiers, said series of line amplifiers and a network switching element have an input buffer coupled therebetween, said network switching element receives input from said PC/PCS modem, said network switching element has a frequency/feedback along with a channel/screen selection function flowing from said switching network bi-directionally to a multi-tuner;

passing data received from said multi-tuner module to a microprocessor; and

passing said data on to a universal asynchronous receiver transmitter via a first bi-directional path, said universal asynchronous receiver transmitter is responsible for all data transfers from a computer system to the computer system's modem output system,

wherein said data transfer occurs between all modules through a series

of parallel bus, a series of serial transmit bus and a series of serial receive bus.

13. The method in Claim 12 further comprises the steps:

aligning said data in a proper configuration by means of a micro controller;

processing said proper configuration by means of a voice, a data, a fax and a video processor through a second parallel bus, a second serial transmit bus and a second serial receive bus, said voice, data, fax and video processor includes a digital signal processing support module used as a prebuffer into a digital signal processor, and wherein said digital signal processor performs all necessary operations on said data, including handshake verification, through a series of built-in algorithms.

EVIDENCE APPENDIX

None

RELATED PROCEEDINGS APPENDING

None

BEFORE THE UNITED STATES PATENT AND TRADEMARK OFFICE
ON APPEAL TO THE BOARD OF APPEALS

In re Application of: Ray Whitney	Date: April 1, 2008
Serial N°: 09/921,375	Group Art Unit: 2642
Filed: 08/02/2001	Examiner: My Xuan Nguyen
For: Digital, Wireless PC/PCS Modem	Docket No. 471

CERTIFICATE OF SERVICE
I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, P.O. Box 1450, Alexandria, VA 22313-1450.

Tracy Lakos 4/9/08
Name: Date
TERRY LAKOS

AMENDED BRIEF ON APPEAL

Hon. Commissioner of Patents and Trademarks
Alexandria, VA 22313-1450

Dear Board:

This is an amended Brief on Appeal made compliant after a Notice sent from the Patent Office on 03/18/2008. The Appeal is based from the Final Rejection, dated 07/31/2007, for the above identified application.

REAL PARTY IN INTEREST

The party(ies) named in the caption of this brief are the real parties of interest in this appeal.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to appellant, appellant's legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in this pending appeal.

STATUS OF CLAIMS

Currently pending are claims 12-13, which were all finally rejected, and are all herein under appeal.

STATEMENT OF AMENDMENTS

A supplemental amendment was filed on 10/29/2007 after final rejection. Amendments made to claims 12 and 13 were entered for purposes of Appeal.

SUMMARY OF CLAIMED SUBJECT MATTER

Referring now to FIGS. 1-5, 7 and 8, a digital, wireless PC/PCS modem 10, hereinafter referred to as PC/PCS modem 10, is shown for incorporation with personal home computers 42, laptop units 44, hand-held computer units 46 and cellular phones 48 for providing wireless communication via satellite transmission. The PC/PCS modem 10 features the ability to transmit

video, computer, voice, and fax data. The PC/PCS modem 10 is connected to a circuit board 20 which holds internal electronic components.

First, a description of the PC/PCS modem 10 for utilization with laptop units 44, hand-held computer units 46 and cellular phones 48 is disclosed henceforth.

Referring now to FIGS. 1, 3, and 4 , a PC/PCS modem 10 is shown in a removed state from a laptop unit 44. The PC/PCS modem 10 is in a PCMCIA card type configuration universally known in the art as associated with a laptop unit 44. The PC/PCS modem 10 would connect into the laptop unit 44 using a type II PCMCIA card slot 22. A perspective view of the PC/PCS modem 10 is shown in FIG. in a utilized state with the PC/PCS modem 10 fully seated in the type II PCMCIA card slot 22 of the laptop unit 44.

Referring more specifically to FIGS. 7 and 8, for purposes of this disclosure, it is envisioned that the hand-held computer unit 46 is designed and configured as having a type II PCMCIA card slot 22 for receiving the PC/PCS modem 10. It is further envisioned that the cellular phone 48 is designed and configured with a PC/PCS modem 10 hingedly attached as a free end 48a with an electrical connector 57 comprising a series of electrical contacts 59, wherein the free end 48a is scaled equivalent to the aforementioned PC/PCS modem 10 for engaging the type II PCMCIA card slot 22.

An antenna 50, complete with a protective cap 51, is provided and tuned to the frequency of a corresponding satellite link and relay wireless system for transmitting and receiving digital signals and sending them to the circuit board 20 to be processed. Such a system allows transference of datum and other services from the laptop unit 44 from home or while traveling. The antenna 50 is attached to the PC/PCS modem 10 using a swivel joint assembly 54. The

swivel joint assembly 54 allows for the antenna 50 to be rotated and aligned to provide optimum transmission and reception of digital signals unlimited with respect to user's locale. The antenna 50 is designed and configured so as to minimize interferencial effects suffered by satellite link and relay wireless communications which commonly occur during storms, while maintaining maximum performance.

The swivel joint assembly 54 is shown providing for the antenna 50 to be in a collapsed position. Such collapsed position facilitates storage and transportability of the laptop unit 44, the hand-held unit 46, and the cellular phone 48.

It should be noted that the orientation of the antenna 50 with respect to the PC/PCS modem 10 and the orientation of the PC/PCS modem 10 with respect to the laptop unit 44 is for purposes of clarity only and is not intended to be a limiting factor.

Referring now to FIG. 3, a top view of the PC/PCS modem 10 is disclosed. The PC/PCS modem 10 is supplied in the standard shape, size and configuration to match the PCMCIA standards as developed by the computer industry. An enclosure top 55 is held in place by a series of fastening means 68, such as a screw. The enclosure top 55 is removable to allow for repair or adjustment of any internal electronic components located inside the PC/PCS modem 10.

Referring now to FIG. 4, along the leading edge of the PC/PCS modem 10 is an electrical connector 57, comprising a series of electrical contacts 59. The electrical connector 57 would be of the standard arrangement as defined by the computer industry for PCMCIA connections.

Referring next to FIG. 5, according to the preferred embodiment of the present invention, the laptop unit 44 is provided with at least three tuner cards 70 for providing a multi-task video screen 80 split into a plurality of frames 82 of equal dimension, wherein each frame 82 providing

for a specific functional operation, task, or application.

Specifically referring to FIGS. 2 and 5, for purposes of this disclosure, the preferred embodiment is shown and described as having nine tuner cards 70 thus providing a multi-task video screen 80 split into nine frames of equal dimension, wherein each frame providing for a specific functional operation, task, or application.

In operation, the tuner cards 70 provide the user with the capability of performing various functional operations and transmissions including video, voice, text, fax, and viewing of satellite television broadcast, while all nine frames 82 being simultaneously displayed via the multi-task video screen 80.

Video transmission is accomplished via a swivel-based, independent micro camera 90 rotatable 180°.

A microphone 92 is provided for converting a transmitted sound into a sound signal, wherein the sound signal is further converted into a transmitting signal which is transmitted through the antenna 50, 50a.

A loudspeaker 94 is provided for generating an audible sound in response to reception of digital signals. The loudspeaker 94 and the microphone 92 are coupled to a microprocessor 65 via an audio interface block 66.

Referring now to FIG. 6, an alternate embodiment of the present invention is disclosed, wherein an integrated PC/PCS digital wireless modem 12, hereinafter referred to as integrated PC/PCS modem 12, is shown for incorporation within personal home computers 42 for providing wireless communication via satellite transmission. The integrated PC/PCS modem 12 features the ability to transmit video, computer, voice, and fax data. An antenna 50a is provided and is

connected to the integrated PC/PCS modem 12 for transmitting and receiving digital signals and sending them to the circuit board 20 to be processed. The antenna 50a, complete with a protective cap 51a, is provided and operatively tuned so as to allow transmission to a corresponding satellite link and relay wireless system.

The antenna 50a is attached to an external housing 52 of the personal home computer 42 using a swivel joint assembly 54 which allows for the antenna 50a to be rotated and aligned to provide optimum transmission and reception of digital signals unlimited with respect to user's locale. The antenna 50a is designed and configured so as to minimize interferencial effects suffered by satellite link and relay wireless communications which commonly occur during storms, while maintaining maximum performance. It should be noted that the orientation of the antenna 50a with respect to its attachment location as illustrated in FIGS. , is for purposes of clarity and is not intended to be a limiting factor.

Specifically referring to FIGS. 5 and 6, the alternate embodiment of the present invention is provided with at least three tuner cards for providing a multi-task video screen 80 split into a plurality of frames 82 of equal dimension, wherein each frame 82 providing for a specific functional operation, task, or application such as video, voice, text, fax, and viewing of satellite television broadcast. The alternate embodiment of the present invention is shown and described as having nine tuner cards 70.

Video transmission is accomplished via a swivel-based micro camera 90 rotatable 180°.

A microphone 92 is provided for converting a transmitted sound into a sound signal, wherein the sound signal is further converted into a transmitting signal which is transmitted through the antenna 50, 50a.

A loudspeaker 94 is provided for generating an audible sound in response to reception of digital signals. The loudspeaker 94 and the microphone 92 are coupled to a microprocessor 65 via an audio interface block 66.

Referring next to FIG. 5, a description regarding circuitry associated with the PC/PCS modem 10 incorporated with the laptop unit 44 is disclosed. It should be noted; however, that the circuitry to be described henceforth is intended to be equally applicable to the alternate embodiment of the present invention. Digital signals transmitted via satellite link and relay wireless system is received by the antenna 50 and are passed therefrom through a series of line amplifiers 96. An input buffer 98 is coupled between the series of line amplifiers 96 and a network switching element 99, which receives input from the PC/PCS modem 10. Frequency/Feedback 112 along with Channel/Screen selection function 114 flows from the switching network element 99 bi-directionally to a multi-tuner module 100 where data is passed therefrom to the microprocessor 65. This data is then passed on to a universal asynchronous receiver transmitter 72 via a first bi-directional path 75. The universal asynchronous receiver transmitter 72 is responsible for all data transfers from the computer system to its modem output system. This described data transfer occurs between these and all modules through a series of parallel bus 80, a series of serial transmit bus 85 and a series of serial receive bus 90. The first of these occurs with a micro controller 95. The micro controller 95 is dedicated to aligning the data in the proper configuration to be processed by a voice, audio, data, fax and video processor 110 (indicated by a dashed box) through another parallel bus 80, serial transmit bus 85 and serial receive bus 90. The voice, data, fax and video processor 110 consists of a digital signal processing support module 105, used as a prebuffer into a digital signal processor 112. The

digital signal processor 110 performs all necessary operations on the data, including handshake verification, through a series of built in algorithms. It is envisioned that the algorithms would be software and firmware ungradable to allow for future enhancements in wireless communications standards. Data from the digital signal processor 112 is then passed to a coding - decoding device 115 where it is assembled into data packets. Data from the coding - decoding device 115 is transferred on a transmit "A" line 120 and a receive "A" line 125 to a PCS module 130 and an internal data access arrangement 135. The PCS module 130 provides the necessary interface to the wireless personal communication system through the antenna 50 and will be internally programmable with regards to calling systems, phone numbers, data transfer protocols, system requirements and the like. It will be password protected to only allow authorized sellers to program the above variables. It is envisioned that this programming and reprogramming will occur separate from the laptop unit 44 (not shown in this FIG.) through a special interface. The internal data access arrangement 135 is in physical connection to a particular phone system and is envisioned to allow for specific system dependent items such as special ring requirements, caller identification and other host specific items. A switched data bus 140 shown as interconnecting to the universal asynchronous receiver transmitter 72, the digital signal processing support module 105, the PCS module 130, and the internal data access arrangement 135 allow for data acknowledgment and step transfer functions for data that is communicated on the serial busses. It should be noted that data transfers through all blocks in a bidirectional pattern as would be occurring during downloading and uploading of information.

Mapping of Independent Claim 12

12. A method to utilize a digital, wireless PC/PCS modem

having an antenna attached to a PCMCIA card-type interface in communication with an integrated circuit board, said modem works in conjunction with a computer provided with a swivel-based camera, a microphone and at least three tuner cards to relay wireless communications via satellite, said method comprises the steps:	...the alternate embodiment of the present invention is provided with at least three tuner cards for providing multi-task video screen 80 split into a plurality of frames 82 of equal dimension, wherein each frame 82 providing for a specific functional operation, task, or application such as video, voice, text, fax and viewing of satellite television broadcast (Pg. 13, ll. 5-10); video transmission is accomplished via a swivel-based micro camera 90 (Pg. 13, ll. 12-13); A microphone 92 is provided (Pg. 13, line 14)
passing digital signals transmitted via a satellite link and a wireless relay system from said antenna that receives said signals to a series of line amplifiers,	Digital signals transmitted via satellite link and relay wireless system is received by the antenna 50 and are passed therefrom through a series of line amplifiers 96. (Pg. 14, ll. 4-6).
said series of line amplifiers and a network switching element have an input buffer coupled therebetween, said network switching element receives input from said PC/PCS modem,	An input buffer 98 is coupled between the series of line amplifiers 96 and a network switching element 99, which receives input from the PC/PCS modem 10. (Pg. 14, ll. 6-8).
said network switching element has a frequency/feedback along with a channel/screen selection function flowing from said switching network bi-directionally to a multi-tuner; passing data received from said multi-tuner module to a microprocessor; and	Frequency/Feedback 112 along with Channel/Screen selection function 114 flows from the switching network element 99 bi-directionally to a multi-tuner module 100 where data is passed therefrom to the microprocessor 65. (Pg. 14, ll. 8-11).
passing said data on to a universal asynchronous receiver transmitter via a first bi-directional path, said universal asynchronous receiver transmitter is responsible for all data transfers from a computer system to the computer system's modem output system,	This data is then passed on to a universal asynchronous receiver transmitter 72 via a first bi-directional path 75. The universal asynchronous receiver transmitter 72 is responsible for all data transfers from the computer system to its modem output system. (Pg. 14, ll. 11-14)

wherein said data transfer occurs between all modules through a series of parallel bus, a series of serial transmit bus and a series of serial receive bus.	This described data transfer occurs between these and all modules through a series of parallel bus 80, a series of serial transmit bus 85 and a series of serial receive bus 90. (Pg. 14, ll. 14-16).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The art Examiner relies upon the following references for the bases of rejections:

U.S. Patent No. 5,915,020 to Tilord, which discloses a portable device that includes a hinged enclosure, a satellite antenna mounted to a display monitor and a PCMCIA card slot;

U.S. Patent No. 5,428,671 to Dykes, which discloses a laptop that contains a modem and a UART/support chip that serially communicates data to a controller; and,

U.S. Patent No. 6,141,062 to Hall *et al.*, which discloses multiple video streams multiplexed such that individual streams are synchronized with a particular clock signal.

In the Final Office Action dated Jul. 31, 2007, Examiner rejected claims 12 and 13 under 35 USC § 103(a) as being unpatentable over Tilford in view of Dykes and Hall.

ARGUMENT

Rejections under 35 U.S.C. 103(a)

Applicant firstly contends that Tilford cannot be considered a reference in the combination for Independent Claim 12 because it fails to teach the elements as cited by Examiner.

Tilford teaches a video camera 123 fitted within an enclosure case of a portable device (col. 13, ll. 50-51). Tilford shows the camera *fixed* within the enclosure (FIG. 8). Nowhere is it taught to comprise a *swivel* capability. Applicant rather claims a swivel feature to the camera.

Tilford teaches a buffer within a transport IC 68 (col. 11, ll. 65-68). The buffer stores output passed to the transport IC from an inverse forward correction block 66 (FEC^{-1}). The FEC^{-1} receives a bitstream downconverted from a tuner/demodulator 62 (col. 11, ll. 50-65; FIG. 7). Applicant alternatively claims an input *buffer coupled between a series* of amplifiers and a

network switching element. Nowhere in Tilford is a buffer taught or suggested either coupled to or between the Feed LNB 41 and the tuner/modulator 62. Applicant contends the varied placements of the buffers in both Tilford and Applicant's inventions cause a method for signal transmission to not be the same; Tilford cannot be considered a reference in the combination.

Applicant contends that because the foregoing argument overcomes Tilford as a reference, the base claim for which dependent claim 13 depends is in condition for allowance. Claim 13 incorporates all of the distinct limitations of Independent Claim 12; it is allowable for at least the reasons articulated in support of Claim 12. More importantly, Dykes cannot render Claim 13 obvious without Tilford in the combination.

U.S. Patent No. 5,428,671 to Dykes et al., assigned on its face to Compaq Computer Corporation, is directed to a modem for communication between a computer and a cellular phone. A host computer port is connected to a cellular phone port. The host computer sends commands to the cellular phone. The connection then converts the host computer commands into a format that can be received by the cellular phone. Once converted, the information is sent to the cellular phone. The host computer command is then executed.

The examiner cites in Dykes et al. Fig. 2, Col. 6 Lines 51 to Col. 8, Line 63. To paraphrase the portion of the cited reference, the computer in Dykes is bidirectionally connected to a UART comprising of several buses. A microprocessor organizes the data and a digital signal processor performs all operations through algorithms designed for communication with a modem. The organization of the data is for voice, data, and video.

In undertaking a determination of whether a reference, or a combination of references,

renders a claim(s) obvious under 35 U.S.C. § 103(a), the examiner must show that the reference or combination of references teach or suggest every element of the claim(s) in question. MPEP § 706.02(j). In regard to the several rejections of the claims under 35 U.S.C. § 103(a), based upon the above arguments, it is felt that the differences between the present invention and all of these references are such that rejection based upon 35 U.S.C. § 103(a), in addition to any other art, relevant or not, is also inappropriate. However, by way of additional argument applicant wishes to point out that it is well established at law that for a proper *prima facie* rejection of a claimed invention based upon obviousness under 35 U.S.C. § 103(a), the cited references must teach every element of the claimed invention. Further, if a combination is cited in support of a rejection, there must be some affirmative teaching in the prior art to make the proposed combination. See Orthopedic Equipment Company, Inc. et al. v. United States, 217 USPQ 193, 199 (Fed. Cir. 1983), wherein the Federal Circuit decreed, "Monday Morning Quarter Backing is quite improper when resolving the question of obviousness." Also, when determining the scope of teaching of a prior art reference, the Federal Circuit has declared:

> "[t]he mere fact that the prior art could be so modified should not have made the modification obvious unless the prior art suggested the desirability of the modification." (Emphasis added). In re Gordon, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

There is no suggestion as to the desirability of any modification of the references to describe the present invention. An analysis of the disclosures within the cited references fails to cite every element of the claimed invention. When the prior art references require a selective combination to render obvious a subsequent claimed invention, there must be some reason for the selected combination other than the hindsight obtained from the claimed invention itself.

Interconnect Planning Corp v. Feil, 774 F.2d 1132, 227 USPQ 543 (Fed. Cir. 1985). There is nothing in the prior art or the Examiners arguments that would suggest the desirability or obviousness of making a PC/PCS modem of the present functionality. Uniroyal, Inc. v. Rudkki-Wiley Corp., 837 F.2d 1044, 5 USPQ 2d 1432 (Fed. Cir. 1988). The examiner seems to suggest that it would be obvious for one of ordinary skill to attempt to produce the currently disclosed invention. However, there must be a reason or suggestion in the art for selecting the design, other than the knowledge learned from the present disclosure. In re Dow Chemical Co., 837 F.2d 469, 5 USPQ.2d 1529 (Fed. Cir. 1988); see also In re O'Farrell, 853 F.2d 894, 7 USPQ 2d 1673 (Fed. Cir. 1988).

Accordingly, the reversal of the Examiner by the honorable Board of Appeals is respectfully solicited.

Respectfully submitted,

John D. Gugliotta, P.E., Esq.
Registration No. 36,538

Patent, Copyright & Trademark Law Group, LLC
USPTO Customer No. 33055
6100 Oak Tree Boulevard
Suite 200
Independence, OH 44131

(330) 253-2225
Facsimile (330) 253-6658

CLAIMS APPENDIX

The claims on appeal are as follows:

12. A method to utilize a digital, wireless PC/PCS modem having an antenna attached to a PCMCIA card-type interface in communication with an integrated circuit board, said modem works in conjunction with a computer provided with a swivel-based camera, a microphone and at least three tuner cards to relay wireless communications via satellite, said method comprises the steps:

passing digital signals transmitted via a satellite link and a wireless relay system from said antenna that receives said signals to a series of line amplifiers, said series of line amplifiers and a network switching element have an input buffer coupled therebetween, said network switching element receives input from said PC/PCS modem, said network switching element has a frequency/feedback along with a channel/screen selection function flowing from said switching network bi-directionally to a multi-tuner;

passing data received from said multi-tuner module to a microprocessor; and

passing said data on to a universal asynchronous receiver transmitter via a first bi-directional path, said universal asynchronous receiver transmitter is responsible for all data transfers from a computer system to the computer system's modem output system,

wherein said data transfer occurs between all modules through a series

of parallel bus, a series of serial transmit bus and a series of serial receive bus.

13. The method in Claim 12 further comprises the steps:

aligning said data in a proper configuration by means of a micro controller;

processing said proper configuration by means of a voice, a data, a fax and a video processor through a second parallel bus, a second serial transmit bus and a second serial receive bus, said voice, data, fax and video processor includes a digital signal processing support module used as a prebuffer into a digital signal processor, and wherein said digital signal processor performs all necessary operations on said data, including handshake verification, through a series of built-in algorithms.

EVIDENCE APPENDIX

None

RELATED PROCEEDINGS APPENDING

None

BEFORE THE UNITED STATES PATENT AND TRADEMARK OFFICE
ON APPEAL TO THE BOARD OF APPEALS

In re Application of: Ray Whitney	)	Date: April 1, 2008
Serial N°: 09/921,375	)	Group Art Unit: 2642
Filed: 08/02/2001	)	Examiner: My Xuan Nguyen
For: Digital, Wireless PC/PCS Modem	)	Docket No. 471

CERTIFICATE OF SERVICE
I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, P.O. Box 1450, Alexandria, VA 22313-1450.

Tracy Lakos 4/9/08
Name: Date
TERRY LAKOS

AMENDED BRIEF ON APPEAL

Hon. Commissioner of Patents and Trademarks
Alexandria, VA 22313-1450

Dear Board:

This is an amended Brief on Appeal made compliant after a Notice sent from the Patent Office on 03/18/2008. The Appeal is based from the Final Rejection, dated 07/31/2007, for the above identified application.

REAL PARTY IN INTEREST

The party(ies) named in the caption of this brief are the real parties of interest in this appeal.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to appellant, appellant's legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in this pending appeal.

STATUS OF CLAIMS

Currently pending are claims 12-13, which were all finally rejected, and are all herein under appeal.

STATEMENT OF AMENDMENTS

A supplemental amendment was filed on 10/29/2007 after final rejection. Amendments made to claims 12 and 13 were entered for purposes of Appeal.

SUMMARY OF CLAIMED SUBJECT MATTER

Referring now to FIGS. 1-5, 7 and 8, a digital, wireless PC/PCS modem 10, hereinafter referred to as PC/PCS modem 10, is shown for incorporation with personal home computers 42, laptop units 44, hand-held computer units 46 and cellular phones 48 for providing wireless communication via satellite transmission. The PC/PCS modem 10 features the ability to transmit

video, computer, voice, and fax data. The PC/PCS modem 10 is connected to a circuit board 20 which holds internal electronic components.

First, a description of the PC/PCS modem 10 for utilization with laptop units 44, hand-held computer units 46 and cellular phones 48 is disclosed henceforth.

Referring now to FIGS. 1, 3, and 4 , a PC/PCS modem 10 is shown in a removed state from a laptop unit 44. The PC/PCS modem 10 is in a PCMCIA card type configuration universally known in the art as associated with a laptop unit 44. The PC/PCS modem 10 would connect into the laptop unit 44 using a type II PCMCIA card slot 22. A perspective view of the PC/PCS modem 10 is shown in FIG. in a utilized state with the PC/PCS modem 10 fully seated in the type II PCMCIA card slot 22 of the laptop unit 44.

Referring more specifically to FIGS. 7 and 8, for purposes of this disclosure, it is envisioned that the hand-held computer unit 46 is designed and configured as having a type II PCMCIA card slot 22 for receiving the PC/PCS modem 10. It is further envisioned that the cellular phone 48 is designed and configured with a PC/PCS modem 10 hingedly attached as a free end 48a with an electrical connector 57 comprising a series of electrical contacts 59, wherein the free end 48a is scaled equivalent to the aforementioned PC/PCS modem 10 for engaging the type II PCMCIA card slot 22.

An antenna 50, complete with a protective cap 51, is provided and tuned to the frequency of a corresponding satellite link and relay wireless system for transmitting and receiving digital signals and sending them to the circuit board 20 to be processed. Such a system allows transference of datum and other services from the laptop unit 44 from home or while traveling. The antenna 50 is attached to the PC/PCS modem 10 using a swivel joint assembly 54. The

swivel joint assembly 54 allows for the antenna 50 to be rotated and aligned to provide optimum transmission and reception of digital signals unlimited with respect to user's locale. The antenna 50 is designed and configured so as to minimize interferencial effects suffered by satellite link and relay wireless communications which commonly occur during storms, while maintaining maximum performance.

The swivel joint assembly 54 is shown providing for the antenna 50 to be in a collapsed position. Such collapsed position facilitates storage and transportability of the laptop unit 44, the hand-held unit 46, and the cellular phone 48.

It should be noted that the orientation of the antenna 50 with respect to the PC/PCS modem 10 and the orientation of the PC/PCS modem 10 with respect to the laptop unit 44 is for purposes of clarity only and is not intended to be a limiting factor.

Referring now to FIG. 3, a top view of the PC/PCS modem 10 is disclosed. The PC/PCS modem 10 is supplied in the standard shape, size and configuration to match the PCMCIA standards as developed by the computer industry. An enclosure top 55 is held in place by a series of fastening means 68, such as a screw. The enclosure top 55 is removable to allow for repair or adjustment of any internal electronic components located inside the PC/PCS modem 10.

Referring now to FIG. 4, along the leading edge of the PC/PCS modem 10 is an electrical connector 57, comprising a series of electrical contacts 59. The electrical connector 57 would be of the standard arrangement as defined by the computer industry for PCMCIA connections.

Referring next to FIG. 5, according to the preferred embodiment of the present invention, the laptop unit 44 is provided with at least three tuner cards 70 for providing a multi-task video screen 80 split into a plurality of frames 82 of equal dimension, wherein each frame 82 providing

for a specific functional operation, task, or application.

Specifically referring to FIGS. 2 and 5, for purposes of this disclosure, the preferred embodiment is shown and described as having nine tuner cards 70 thus providing a multi-task video screen 80 split into nine frames of equal dimension, wherein each frame providing for a specific functional operation, task, or application.

In operation, the tuner cards 70 provide the user with the capability of performing various functional operations and transmissions including video, voice, text, fax, and viewing of satellite television broadcast, while all nine frames 82 being simultaneously displayed via the multi-task video screen 80.

Video transmission is accomplished via a swivel-based, independent micro camera 90 rotatable 180°.

A microphone 92 is provided for converting a transmitted sound into a sound signal, wherein the sound signal is further converted into a transmitting signal which is transmitted through the antenna 50, 50a.

A loudspeaker 94 is provided for generating an audible sound in response to reception of digital signals. The loudspeaker 94 and the microphone 92 are coupled to a microprocessor 65 via an audio interface block 66.

Referring now to FIG. 6, an alternate embodiment of the present invention is disclosed, wherein an integrated PC/PCS digital wireless modem 12, hereinafter referred to as integrated PC/PCS modem 12, is shown for incorporation within personal home computers 42 for providing wireless communication via satellite transmission. The integrated PC/PCS modem 12 features the ability to transmit video, computer, voice, and fax data. An antenna 50a is provided and is

connected to the integrated PC/PCS modem 12 for transmitting and receiving digital signals and sending them to the circuit board 20 to be processed. The antenna 50a, complete with a protective cap 51a, is provided and operatively tuned so as to allow transmission to a corresponding satellite link and relay wireless system.

The antenna 50a is attached to an external housing 52 of the personal home computer 42 using a swivel joint assembly 54 which allows for the antenna 50a to be rotated and aligned to provide optimum transmission and reception of digital signals unlimited with respect to user's locale. The antenna 50a is designed and configured so as to minimize interferencial effects suffered by satellite link and relay wireless communications which commonly occur during storms, while maintaining maximum performance. It should be noted that the orientation of the antenna 50a with respect to its attachment location as illustrated in FIGS. , is for purposes of clarity and is not intended to be a limiting factor.

Specifically referring to FIGS. 5 and 6, the alternate embodiment of the present invention is provided with at least three tuner cards for providing a multi-task video screen 80 split into a plurality of frames 82 of equal dimension, wherein each frame 82 providing for a specific functional operation, task, or application such as video, voice, text, fax, and viewing of satellite television broadcast. The alternate embodiment of the present invention is shown and described as having nine tuner cards 70.

Video transmission is accomplished via a swivel-based micro camera 90 rotatable 180°.

A microphone 92 is provided for converting a transmitted sound into a sound signal, wherein the sound signal is further converted into a transmitting signal which is transmitted through the antenna 50, 50a.

A loudspeaker 94 is provided for generating an audible sound in response to reception of digital signals. The loudspeaker 94 and the microphone 92 are coupled to a microprocessor 65 via an audio interface block 66.

Referring next to FIG. 5, a description regarding circuitry associated with the PC/PCS modem 10 incorporated with the laptop unit 44 is disclosed. It should be noted; however, that the circuitry to be described henceforth is intended to be equally applicable to the alternate embodiment of the present invention. Digital signals transmitted via satellite link and relay wireless system is received by the antenna 50 and are passed therefrom through a series of line amplifiers 96. An input buffer 98 is coupled between the series of line amplifiers 96 and a network switching element 99, which receives input from the PC/PCS modem 10. Frequency/Feedback 112 along with Channel/Screen selection function 114 flows from the switching network element 99 bi-directionally to a multi-tuner module 100 where data is passed therefrom to the microprocessor 65. This data is then passed on to a universal asynchronous receiver transmitter 72 via a first bi-directional path 75. The universal asynchronous receiver transmitter 72 is responsible for all data transfers from the computer system to its modem output system. This described data transfer occurs between these and all modules through a series of parallel bus 80, a series of serial transmit bus 85 and a series of serial receive bus 90. The first of these occurs with a micro controller 95. The micro controller 95 is dedicated to aligning the data in the proper configuration to be processed by a voice, audio, data, fax and video processor 110 (indicated by a dashed box) through another parallel bus 80, serial transmit bus 85 and serial receive bus 90. The voice, data, fax and video processor 110 consists of a digital signal processing support module 105, used as a prebuffer into a digital signal processor 112. The

digital signal processor 110 performs all necessary operations on the data, including handshake verification, through a series of built in algorithms. It is envisioned that the algorithms would be software and firmware ungradable to allow for future enhancements in wireless communications standards. Data from the digital signal processor 112 is then passed to a coding - decoding device 115 where it is assembled into data packets. Data from the coding - decoding device 115 is transferred on a transmit "A" line 120 and a receive "A" line 125 to a PCS module 130 and an internal data access arrangement 135. The PCS module 130 provides the necessary interface to the wireless personal communication system through the antenna 50 and will be internally programmable with regards to calling systems, phone numbers, data transfer protocols, system requirements and the like. It will be password protected to only allow authorized sellers to program the above variables. It is envisioned that this programming and reprogramming will occur separate from the laptop unit 44 (not shown in this FIG.) through a special interface. The internal data access arrangement 135 is in physical connection to a particular phone system and is envisioned to allow for specific system dependent items such as special ring requirements, caller identification and other host specific items. A switched data bus 140 shown as interconnecting to the universal asynchronous receiver transmitter 72, the digital signal processing support module 105, the PCS module 130, and the internal data access arrangement 135 allow for data acknowledgment and step transfer functions for data that is communicated on the serial busses. It should be noted that data transfers through all blocks in a bidirectional pattern as would be occurring during downloading and uploading of information.

Mapping of Independent Claim 12

12. A method to utilize a digital, wireless PC/PCS modem

having an antenna attached to a PCMCIA card-type interface in communication with an integrated circuit board, said modem works in conjunction with a computer provided with a swivel-based camera, a microphone and at least three tuner cards to relay wireless communications via satellite, said method comprises the steps:	...the alternate embodiment of the present invention is provided with at least three tuner cards for providing multi-task video screen 80 split into a plurality of frames 82 of equal dimension, wherein each frame 82 providing for a specific functional operation, task, or application such as video, voice, text, fax and viewing of satellite television broadcast (Pg. 13, ll. 5-10); video transmission is accomplished via a swivel-based micro camera 90 (Pg. 13, ll. 12-13); A microphone 92 is provided (Pg. 13, line 14)
passing digital signals transmitted via a satellite link and a wireless relay system from said antenna that receives said signals to a series of line amplifiers,	Digital signals transmitted via satellite link and relay wireless system is received by the antenna 50 and are passed therefrom through a series of line amplifiers 96. (Pg. 14, ll. 4-6).
said series of line amplifiers and a network switching element have an input buffer coupled therebetween, said network switching element receives input from said PC/PCS modem,	An input buffer 98 is coupled between the series of line amplifiers 96 and a network switching element 99, which receives input from the PC/PCS modem 10. (Pg. 14, ll. 6-8).
said network switching element has a frequency/feedback along with a channel/screen selection function flowing from said switching network bi-directionally to a multi-tuner; passing data received from said multi-tuner module to a microprocessor; and	Frequency/Feedback 112 along with Channel/Screen selection function 114 flows from the switching network element 99 bi-directionally to a multi-tuner module 100 where data is passed therefrom to the microprocessor 65. (Pg. 14, ll. 8-11).
passing said data on to a universal asynchronous receiver transmitter via a first bi-directional path, said universal asynchronous receiver transmitter is responsible for all data transfers from a computer system to the computer system's modem output system,	This data is then passed on to a universal asynchronous receiver transmitter 72 via a first bi-directional path 75. The universal asynchronous receiver transmitter 72 is responsible for all data transfers from the computer system to its modem output system. (Pg. 14, ll. 11-14)

wherein said data transfer occurs between all modules through a series of parallel bus, a series of serial transmit bus and a series of serial receive bus.	This described data transfer occurs between these and all modules through a series of parallel bus 80, a series of serial transmit bus 85 and a series of serial receive bus 90. (Pg. 14, ll. 14-16).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The art Examiner relies upon the following references for the bases of rejections:

U.S. Patent No. 5,915,020 to Tilord, which discloses a portable device that includes a hinged enclosure, a satellite antenna mounted to a display monitor and a PCMCIA card slot;

U.S. Patent No. 5,428,671 to Dykes, which discloses a laptop that contains a modem and a UART/support chip that serially communicates data to a controller; and,

U.S. Patent No. 6,141,062 to Hall *et al.*, which discloses multiple video streams multiplexed such that individual streams are synchronized with a particular clock signal.

In the Final Office Action dated Jul. 31, 2007, Examiner rejected claims 12 and 13 under 35 USC § 103(a) as being unpatentable over Tilford in view of Dykes and Hall.

ARGUMENT

Rejections under 35 U.S.C. 103(a)

Applicant firstly contends that Tilford cannot be considered a reference in the combination for Independent Claim 12 because it fails to teach the elements as cited by Examiner.

Tilford teaches a video camera 123 fitted within an enclosure case of a portable device (col. 13, ll. 50-51). Tilford shows the camera *fixed* within the enclosure (FIG. 8). Nowhere is it taught to comprise a *swivel* capability. Applicant rather claims a swivel feature to the camera.

Tilford teaches a buffer within a transport IC 68 (col. 11, ll. 65-68). The buffer stores output passed to the transport IC from an inverse forward correction block 66 (FEC^{-1}). The FEC^{-1} receives a bitstream downconverted from a tuner/demodulator 62 (col. 11, ll. 50-65; FIG. 7). Applicant alternatively claims an input *buffer coupled between a series* of amplifiers and a

network switching element. Nowhere in Tilford is a buffer taught or suggested either coupled to or between the Feed LNB 41 and the tuner/modulator 62. Applicant contends the varied placements of the buffers in both Tilford and Applicant's inventions cause a method for signal transmission to not be the same; Tilford cannot be considered a reference in the combination.

Applicant contends that because the foregoing argument overcomes Tilford as a reference, the base claim for which dependent claim 13 depends is in condition for allowance. Claim 13 incorporates all of the distinct limitations of Independent Claim 12; it is allowable for at least the reasons articulated in support of Claim 12. More importantly, Dykes cannot render Claim 13 obvious without Tilford in the combination.

U.S. Patent No. 5,428,671 to Dykes et al., assigned on its face to Compaq Computer Corporation, is directed to a modem for communication between a computer and a cellular phone. A host computer port is connected to a cellular phone port. The host computer sends commands to the cellular phone. The connection then converts the host computer commands into a format that can be received by the cellular phone. Once converted, the information is sent to the cellular phone. The host computer command is then executed.

The examiner cites in Dykes et al. Fig. 2, Col. 6 Lines 51 to Col. 8, Line 63. To paraphrase the portion of the cited reference, the computer in Dykes is bidirectionally connected to a UART comprising of several buses. A microprocessor organizes the data and a digital signal processor performs all operations through algorithms designed for communication with a modem. The organization of the data is for voice, data, and video.

In undertaking a determination of whether a reference, or a combination of references,

renders a claim(s) obvious under 35 U.S.C. § 103(a), the examiner must show that the reference or combination of references teach or suggest every element of the claim(s) in question. MPEP § 706.02(j). In regard to the several rejections of the claims under 35 U.S.C. § 103(a), based upon the above arguments, it is felt that the differences between the present invention and all of these references are such that rejection based upon 35 U.S.C. § 103(a), in addition to any other art, relevant or not, is also inappropriate. However, by way of additional argument applicant wishes to point out that it is well established at law that for a proper *prima facie* rejection of a claimed invention based upon obviousness under 35 U.S.C. § 103(a), the cited references must teach every element of the claimed invention. Further, if a combination is cited in support of a rejection, there must be some affirmative teaching in the prior art to make the proposed combination. See Orthopedic Equipment Company, Inc. et al. v. United States, 217 USPQ 193, 199 (Fed. Cir. 1983), wherein the Federal Circuit decreed, "Monday Morning Quarter Backing is quite improper when resolving the question of obviousness." Also, when determining the scope of teaching of a prior art reference, the Federal Circuit has declared:

> "[t]he mere fact that the prior art could be so modified should not have made the modification obvious unless the prior art suggested the desirability of the modification." (Emphasis added). In re Gordon, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

There is no suggestion as to the desirability of any modification of the references to describe the present invention. An analysis of the disclosures within the cited references fails to cite every element of the claimed invention. When the prior art references require a selective combination to render obvious a subsequent claimed invention, there must be some reason for the selected combination other than the hindsight obtained from the claimed invention itself.

Interconnect Planning Corp v. Feil, 774 F.2d 1132, 227 USPQ 543 (Fed. Cir. 1985). There is nothing in the prior art or the Examiners arguments that would suggest the desirability or obviousness of making a PC/PCS modem of the present functionality. Uniroyal, Inc. v. Rudkki-Wiley Corp., 837 F.2d 1044, 5 USPQ 2d 1432 (Fed. Cir. 1988). The examiner seems to suggest that it would be obvious for one of ordinary skill to attempt to produce the currently disclosed invention. However, there must be a reason or suggestion in the art for selecting the design, other than the knowledge learned from the present disclosure. In re Dow Chemical Co., 837 F.2d 469, 5 USPQ.2d 1529 (Fed. Cir. 1988); see also In re O'Farrell, 853 F.2d 894, 7 USPQ 2d 1673 (Fed. Cir. 1988).

Accordingly, the reversal of the Examiner by the honorable Board of Appeals is respectfully solicited.

Respectfully submitted,

John D. Gugliotta, P.E., Esq.
Registration No. 36,538

Patent, Copyright & Trademark Law Group, LLC
USPTO Customer No. 33055
6100 Oak Tree Boulevard
Suite 200
Independence, OH 44131

(330) 253-2225
Facsimile (330) 253-6658

CLAIMS APPENDIX

The claims on appeal are as follows:

12. A method to utilize a digital, wireless PC/PCS modem having an antenna attached to a PCMCIA card-type interface in communication with an integrated circuit board, said modem works in conjunction with a computer provided with a swivel-based camera, a microphone and at least three tuner cards to relay wireless communications via satellite, said method comprises the steps:

passing digital signals transmitted via a satellite link and a wireless relay system from said antenna that receives said signals to a series of line amplifiers, said series of line amplifiers and a network switching element have an input buffer coupled therebetween, said network switching element receives input from said PC/PCS modem, said network switching element has a frequency/feedback along with a channel/screen selection function flowing from said switching network bi-directionally to a multi-tuner;

passing data received from said multi-tuner module to a microprocessor; and

passing said data on to a universal asynchronous receiver transmitter via a first bi-directional path, said universal asynchronous receiver transmitter is responsible for all data transfers from a computer system to the computer system's modem output system,

wherein said data transfer occurs between all modules through a series

of parallel bus, a series of serial transmit bus and a series of serial receive bus.

13. The method in Claim 12 further comprises the steps:

aligning said data in a proper configuration by means of a micro controller;

processing said proper configuration by means of a voice, a data, a fax and a video processor through a second parallel bus, a second serial transmit bus and a second serial receive bus, said voice, data, fax and video processor includes a digital signal processing support module used as a prebuffer into a digital signal processor, and wherein said digital signal processor performs all necessary operations on said data, including handshake verification, through a series of built-in algorithms.

EVIDENCE APPENDIX

None

RELATED PROCEEDINGS APPENDING

None